CASES OF HERNIA:

WITH REMARKS.

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As there are few surgical diseases in which every practitioner is so frequently called upon to act for himself, as in Hernia, and, therefore, few in which he is so immediately interested, I offer the following cases, as illustrating some of the difficulties which occur from time to time, in the treatment of this disease.

Case 1. P. B., aged 40, the subject of the present case, had been affected with hernia for a great many years. At an early period of the complaint he had worn a truss, but for some time back had discontinued its use. Since then, the swelling had rapidly increased in bulk, but he had always been able to reduce it himself, when it became troublesome.

On the 25th of August 1840, he was attacked with vomiting and twisting pains in the belly, which, as he had been living rather freely for a few days previously, he attributed to an "attack of bile," and did not apply for medical assistance until the morning of the 27th, when the hernial swelling became painful, and on trying to reduce it as usual, he found he could not do so. He then sent for Mr Lawrie, who tried to reduce it by taxis, but without success. I saw him for the first time, at 9 P.M. of the 27th August, along with Mr Lawrie, when his state, as recorded in my notes, was as follows:—

There is a large scrotal hernia on the right side, which is tense, and painful to the touch; but the contents of which can be returned into the abdomen, with the exception of a hard rounded mass, which feels exactly like an enlarged testicle, and which cannot be reduced. The cord can be felt behind the hernia, and the testicle, of natural size, in its usual position, at the lower part of the scrotum. He has frequent vomiting and hiccup; the belly is tense, tympanitic, and tender to the touch, and he complains of severe twisting pains from the hernia towards the navel. Except a scanty stool when the vomiting first began, he has had no motion in his bowels since the commencement of the attack, although enemata and laxative medicines have been given. The expression of his countenance is anxious; skin rather warm, and covered with perspiration; pulse 108. He says that he never felt the "hard lump" in the rupture on any previous occasion.

At half-past 11 A.M., I saw him, along with Drs J. A. Robertson, J. Reid, and Duncan. The symptoms had become more urgent, and

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there was constant hiccup. Cold having been applied to the tumour, and the taxis again fairly tried, but unsuccessfully, I proceeded to operate. An incision about three inches long was made over the swelling, commencing at the situation of the deep ring, and continued downwards; the different coverings were then divided, and the sac exposed and opened, in the usual manner, to a sufficient extent to enable me to pass my finger upwards to the ring. Having divided some sharp resisting fibres at that point, I next proceeded to reduce the contents of the sac; but after reducing some convolutions of the gut, I found that the intestine seemed to be firmly fixed below; and on opening the hernial sac, a little farther down, I exposed a rounded fleshy-looking mass, evidently adherent to the scrotum by its outer surface. Its appearance was singular, resembling somewhat a portion of the large intestine twisted round the lower part of the loop of the small intestine, which had been partially reduced, and some of those present thought it was an intussusception of the bowel contained in the hernial sac. As, however, it was evident that its circumference strangulated the other portion of bowel, it was resolved to notch its edges slightly with the bistoury, at different parts, so as to try and relieve the bowel embraced by it. So tight was the constriction, that I could not introduce the probe-pointed bistoury between its edge and the intestine, and was obliged at first to divide from without inwards. When the stricture was thus relieved, the true nature of the case was at once seen, viz. that the fleshy-looking substance surrounding and strangulating the intestine, was a small subdivision of the lower part of the sac, greatly thickened, altered in structure and appearance, separated from the upper portion of the sac by a firm, narrow neck, and closely adherent to the scrotum below. The bowels were then reduced, a compress and bandage applied over the wound, and a large opiate draught directed to be given immediately.

I saw him again at 3 P.M., and found that he had had no return of the vomiting or hiccup; the bowels had not yet acted, but the enema had just been given before I called. His pulse had fallen to 96, and he expressed himself as much relieved.

At 8 P.M., his pulse had fallen to 86, and was soft; he had had one evacuation after the enema; he said he felt much better, complained of no pain on pressing the abdomen, except in the immediate neighbourhood of the wound. I directed him to take half an ounce of castor oil, to obtain a free motion from the bowels, and to have another opiate at night. I offered to send a person to watch him, but his friends stated that they had procured one of his own relations, a sick nurse, for that purpose, whom he would prefer to a stranger. I left strict orders to keep him perfectly quiet, and to let me know at once should any unfavourable symptoms appear.

I heard nothing further till next morning, when, on my way to visit him, I met a person coming for me, who said he had not been quite so well during the night; and on entering his room, to my surprise I found him moribund, and no one in the room with him.

From his landlady I then learnt that no sick nurse had ever been in attendance, and that his brother and some acquaintances had sat up with him; that they had given him, at his own request, a quantity of porridge and beer, shortly after which the vomiting had recommenced, with pain in the belly; and these symptoms had been allowed to go on without ever sending for me or Mr Lawrie.

Every effort was made to procure a *post-mortem* examination of the body, but without success.

The points principally worthy of remark in the case are, 1st, The unusual position of the seat of the stricture, viz., in the body of the sac, and towards the lower part of the scrotum, and the peculiar appearance of the lower part of the sac, as seen during the operation; 2d, Some symptoms and features of the case, which, taken in conjunction with the patient's previous history, may serve as guides in the diagnosis of similar cases, and may also lead us to modify our operative procedure in such cases.

With regard to the position of the constriction, it may be said, that, though rare, it has been noticed by several writers on hernia. Scarpa gives a plate of a hernia, with constriction of the sac in the scrotum, and points out the double swelling, as marking the nature of the case. Lawrence mentions the case of a young man on whom he operated, in whom there was a very tight stricture midway between the testis and external ring, and where he had great difficulty in distinguishing the true nature of the lower swelling, the upper part of the sac having been opened first. Pott, Wrisberg, and Pelletau, all mention having met with similar cases; but these differ from that which I have just detailed, inasmuch as they were all cases of congenital hernia, and the constriction in the middle of the sac was caused by the contraction marking the natural division of the tunica vaginalis from the general peritoneal sac. I consider this an important difference in a practical point of view, because in these cases, although the sac would be constricted in an unusual position, and therefore render the nature of the case sufficiently puzzling, still the lower part would be of the same appearance as the upper portion, they would both present the usual appearance of serous membrane, and thus the continuity of the upper and lower portions would be more readily recognised. Whereas, in the case I have described, the causes which had given rise to the constriction in the sac had also effected alteration of structure in that part of it below the stricture, and thus gave rise to greater embarrassment in the operation. What these causes were, and how they had acted in producing these effects, are, I think, obvious from the history of the case. The man, when first affected with a small inguinal hernia, had worn a truss, and continued its use for many years. The effect which this would have by its continued pressure in causing constriction of the neck of the small sac, where it lay opposite the external ring, and also in condensing and altering the structure of its whole surface generally, will, I think, be readily admitted. After a time, the use of the truss was discontinued, and the result

was, that a larger hernial protrusion took place, not entering into the original sac, owing to the narrowness of its opening at the contracted neck, but carrying along with it a fresh portion of peritoneum, and pushing the small sac down before it into the scrotum. So long as matters remained in this state, the patient could always reduce it himself; but on this one unfortunate occasion, a part of the bowel passed through the contracted part into the lower division of the sac, (or into what was the sac of the original small hernia). This was the state of parts, when the operation was performed. The upper part of the sac was opened, and part of the intestines returned, when a small tumour was brought into view closely connected with the scrotum; and now came the embarrassment, for there was no appearance of continuity between this and the superior part of the sac, owing to the tightness of the contraction; it was also totally different in appearance, and to the touch. Here, I think, it will be allowed that this was much more embarrassing than the cases of congenital hernia, where the lower part, or tunica vaginalis, unaltered in structure, would be more easily recognised, and where, from the relative position of the testicle, further assistance in diagnosis might be gained. Indeed, I confess, that the only thing which decided my action in this case, was the practical consideration, that whatever the thick fleshy substance surrounding the intestine might be, it was evidently strangulating it, and therefore equally evident, that its constricting edges must be divided to relieve the strangulation.

We now consider those points in the case, which may assist us in our diagnosis, and regulate our operative measures in similar cases. The diagnostic marks of most value, were those derived from examination of the swelling, and the feeling of it when trying to reduce it by taxis ; for, although it presented at first sight the usual uniform appearance of a large scrotal hernia, yet a small "hard lump" could be felt at its lower part, distinct from the rest, and on attempting reduction, all the contents of the sac could be returned, except this "lump," which the patient, who had hitherto been in the habit of reducing the swelling himself, at once stated, he had never felt there before. Attention to these points, connecting them with the history of the case already mentioned under the former head, when speaking of the position and peculiarities of the structure on the sac, would I think lead the surgeon to discover the true character of the case, before proceeding to operate; and then the question arises, how should such knowledge modify our plan of operation? Should we cut down upon the small swelling at the lower part of the scrotum, divide the constricted part of the sac, and reduce the bowel, without interfering with the upper division of the sac at all? I do not think this would be a very judicious plan; for, in the first place, the lower part of the scrotum is not the most favourable place for incisions; and, further, we may have obstacles to the reduction of the hernia situated higher up, and if we require to divide them also, then our incision would extend through nearly the whole length of the scro-

tum, up to the inguinal ring, a thing always to be avoided. I should, for my own part, if I altered my mode at all, in a similar case, reduce as much as possible of the hernia, before proceeding to the operation, and this would bring the irreducible portion, or smaller division of the sac, up towards the inguinal region and upper part of the scrotum, and then the incisions might be made in the usual manner; only we must recollect that the contents of the larger or superior division of the sac having been reduced, the smaller or lower portion would necessarily become invaginated within it, so that more than one layer of serous membrane would be divided before the strangulated intestine would be exposed.

Case 2. On the 19th May 1843, I was requested by Mr Menzies to visit L——, aged 33, who was labouring under symptoms of strangulated hernia. I found the patient suffering from incessant vomiting, his countenance anxious, pulse 115, and small. There was a small but very tense oblique inguinal hernia on the right side, unyielding on pressure, and painful. The whole abdomen, also, was tender and tympanitic. He said that though for some time subject to the rupture coming down, the urgent symptoms only appeared that morning. On carefully examining the scrotum, the right testicle could be felt much atrophied, and about the size of a small flattened bean, from which the cord, also much atrophied, could be traced upwards. The left testicle, although somewhat larger, was also atrophied. On first seeing the patient, I was much struck by his boyish appearance, and thought that I must have misunderstood Mr Menzies regarding his age. He stated, that some time ago he suffered from a pain and difficulty in making water, which came on gradually, and without any assignable cause, that then the testicle first swelled to a very large size, and was very painful, and subsequently began to diminish, and so gradually wasted away. As the swelling in the scrotum diminished, the protrusion of the bowel began to appear occasionally, when in the erect position, but was always readily reduced by the hand, and as he supposed it was in some way connected with the disease of the testicle, he did not like to mention it to any one. The difficulty of making water had been very great just before the present attack; he stated also, that he had for some years been troubled with what he calls an asthmatic cough. I now attempted to reduce the hernia by taxis, but ineffectually. I then explained to him, that an operation would be required, but he wished to delay for an hour or two, till he saw some friends whom he expected.

I saw him again in the course of two hours, before which time Mr Menzies had bled him freely, and tried the taxis again in the warm bath, but without effect. As the symptoms were even more urgent than before, he now saw the necessity of submitting to an operation. This was done by the usual incision along the tumour, the skin, superficial and intercolumnar fasciæ, being divided, there appeared a large, rounded mass of fat, enveloped in a

cyst of dense cellular tissue. On dissecting through this, the hernial sac was seen and opened. It contained a portion of small intestine, very much distended; I then felt a constriction about the middle of the inguinal canal, which I divided; but on passing my finger upward, I found that there existed a very tight, firm stricture higher up, apparently in the neck of the sac. On this being divided, there escaped a large quantity of dark-coloured serum. The bowel was then reduced, the edges of the wound united by sutures, and the pad and bandage applied; and I directed him to take a large opiate draught.

Next morning I found that he had passed a good night, having had no return of the vomiting. His pulse was 90, but soft; tongue moist. He complained, however, that since the operation his cough had troubled him very much. As his bowels had not been freely opened, he was ordered an enema immediately, and to have a sinapism over the chest, and to continue the opiates combined with ipecacuan.

On the third day, I found that his bowels had been very freely opened, and he was free from any bad abdominal symptoms except pain at the wound, from constant coughing. But the cough had become much worse, and expectoration was difficult. The mucous râle was heard over both sides of the chest. The pulse was 90, but soft and compressible. Mr Menzies had been obliged to stop the use of opiates, owing to their having affected the pulse, and rendering it irregular. He was ordered to apply a large blister over the anterior and upper part of the chest and to take an expectorant mixture for the cough.

On the fourth day, the chest symptoms were somewhat alleviated. The wound was looking well. He had no tenderness at any part of the abdomen.

He continued better for some days whilst the blister remained open; but as it healed, the bronchitic symptoms again became troublesome, but yielded gradually to the use of successive blisters and stimulating expectorants. The union of the incision was, of course, interfered with by the constant cough disturbing the parts; but from the third day after the operation he did not suffer from a single abdominal symptom, and the cure was completed in about four weeks.

Case 3. M——, aged 65, affected with oblique inguinal hernia from an early period of life, but for which he had never worn a truss, felt, whilst exerting himself, a sudden increase of the protrusion, and on trying to reduce it as usual, found he could not do so. He was seen in the course of the day by Dr Burn, who, on examination, found a large and tense scrotal hernia, which he could not succeed in reducing by the taxis. I visited him, at Dr Burn's request, about 10 P.M., and found him suffering from the usual symptoms of strangulated hernia. On examination, I found a very large and tense scrotal hernia on the left side, which was so very

painful to the touch, that he could scarcely allow it to be pressed without excruciating suffering. This state probably arose from his own constant but unavailing efforts to reduce it. All the usual preliminaries having been already used, I merely applied cold over the swelling till Dr Burn arrived. I then attempted reduction by the taxis, as the cold had allayed the tenderness of the swelling. As this, however, did not prove successful, I proceeded to the operation, which presented nothing particular, except that, owing to the patient being very fat, the depth of parts was greater than usual, and that the hernia, being very large, and composed of the sigmoid flexure of the colon, required a very free division of the parts surrounding its neck before it could be returned.

As regards the immediate effects of the operation as evinced by abdominal symptoms, these were very slight. Some tenderness occurred, for which he was bled promptly by the gentleman left in charge, and opiate draughts administered. The bowels were slow in acting at first, as is not unfrequently the case where the large intestine is the part protruded; but except these, there was not a single bad abdominal symptom. This patient, however, had very nearly sunk under symptoms of bronchitis supervening on the second day after the operation. He had been for some years affected with "cough and asthma," but was quite well at the time of the operation, during the performance of which he was not exposed to cold, for it was done in bed, in a small bed-closet, and was by no means tedious. Yet, as I have said, the bronchitic symptoms appeared almost immediately after the relief of the abdominal symptoms. Rapid effusion into the bronchial tubes on both sides of the chest took place, attended with general febrile symptoms, irregular pulse, and great thirst. At first blisters and antimonial expectorants were used with relief; and subsequently, when the pulse became weak and irregular, stimulant expectorants and opiates were substituted, and also wine and beef-tea given to support his strength. Under these remedies he made a gradual but slow recovery. The wound at first healed well, but afterwards was affected by the weakened state of his health, and also apparently by the application of the blisters to the chest, for whenever these were applied, and had fairly risen, then the wound began to look pale and flabby, and union of part of it previously formed gave way, the healing process again becoming active as the blistered surface on the chest healed.

My object in noticing the two foregoing cases is to direct attention to a complication sufficiently troublesome in itself, as a concomitant of hernia, and which I cannot help thinking is more directly connected with the operation than we might at first suppose. I believe it to be the immediate result of the constitutional irritation consequent on the operation, in patients predisposed to bronchitis, which, in such patients, instead of affecting the peritoneum or intestinal canal, and thus giving rise to symptoms of abdo-

minal irritation or inflammation, produces in them these bronchitic symptoms in an aggravated form; and thus, whilst little or no abdominal uneasiness is manifested throughout, the surgeon has to contend with a series of symptoms equally dangerous, and perhaps even less controllable, than those which more usually follow the operation.

The former of these two cases is also interesting, from the circumstances preceding the protrusion. The obscure affection of the genito-urinary organs, the swelling of the cord and testicle, first distending the inguinal canal and the abdominal rings, and then the complete atrophy of these organs diminishing resistance, and thus readily permitting protrusion, are all evidently connected with the appearance of the hernia in this man.

Case 4. Mrs M——, aged about 40, was attacked on the 13th of November last, with violent pain in the bowels and incessant vomiting, which she considered as colic, but finding that the medicine she took had no effect in either relieving the pain or in procuring motion of the bowels, she sent for my friend, Mr Beath of Castle Street, who found her labouring under all the symptoms of hernia. She said she had no swelling in the groin, but on Mr Beath examining, he at once detected a considerable femoral hernia on the left side, which he tried to reduce by the taxis, but without success. The nature of her case was explained to her, and she was told that if it could not be reduced by other means, an operation would be necessary. On visiting early next morning, Mr Beath found that the vomiting had entirely ceased as well as the severe pain in the bowels, and that the patient felt easier, but the hernia felt as tense and was as considerable as ever, whilst the constipation still continued notwithstanding the use of enemata and other measures to procure evacuations; her pulse was 76 and soft; skin of moderate heat,—it was under these circumstances that I first visited the patient along with Mr Beath at 12 o'clock of the 14th.

Her state at this time was as follows:—"countenance flushed and anxious, skin hot but covered with perspiration, tongue moist, pulse 94 and rather wiry, and there is considerable thirst. The constipated state of the bowels continues, but she has had no return of the vomiting. The hernial swelling is tense and painful to the touch, but she does not complain much of pain over the abdomen, which is tympanitic and distended. I again tried the reduction by taxis, the hernia lay rather more obliquely upwards and outwards over Poupart's ligament than usual, and particular attention was had to bring it into a line with the axis of the femoral ring before attempting to return it; but the tense unyielding feel of the swelling evidently showed that its reduction could only be effected by operation. The cessation of the violent symptoms at first felt had made the patient suppose she was somewhat better, so she said she wished it delayed for a little.

At 3 P.M. I saw her along with Sir G. Ballingall and Mr Beath.

The symptoms continued much the same as at the former visit, except that the pulse was quicker and smaller. On the danger of her situation being now shown her, she consented to the operation. I therefore proceeded to perform it. The integuments having been divided by a single incision made in an oblique direction over the swelling, the sac was exposed after dissecting through the fat and glands covering it. On opening the sac, which was large, a considerable quantity of dark serum escaped, and exposed a small tense knuckle of intestine of a dark colour, very tightly constricted,—so tight indeed was the stricture that I could scarcely insinuate the nail of my forefinger between it and the intestine, so as to guide the probe-pointed bistoury. Having notched it slightly, I then passed the point of my finger a little further up, and divided the stricture fully. The bowel was then carefully examined, and although very dark and indented at the constricted part, seemed sufficiently healthy to be reduced, which was accordingly done, the wound dressed, and bandage applied in the usual manner. She was then put to bed, and a large opiate administered.

In the evening her pulse had risen, and there was slight tenderness in the abdomen, with heat of skin and thirst. For these symptoms she was promptly and freely bled by Mr B., and a pill of calomel and opium given. Next morning she had a small dose of castor oil, after which her bowels were freely opened, and after this she never had a bad symptom, and the wound healed kindly.

This case affords a good example of comparatively slight constitutional disturbance, and of remission, or rather gradual subsidence of the more prominent and violent symptoms, occurring where there is, nevertheless, a tightly constricted hernia, and shows the risk and danger of temporising in such cases, merely because the symptoms do not seem very urgent. A few hours, in all probability, would have given a very different result to the case just narrated, for I have seldom felt a tighter stricture than in this case, and the bowel was of a very dark colour even at the time of the operation. I think that in all such cases, the urgent symptoms with which the attack commenced, taken in conjunction with the obstinate constipation, and the tense and irreducible state of the hernial swelling, form a sufficient warrant to proceed to early operation, particularly where the hernia, as in the case of Mrs M——, is of recent date. I say particularly in recent herniæ, because no doubt there are cases of old irreducible hernia where our course is not quite so clear. Cases in which from irritation or inflammation of the contained intestine or omentum, or of the hernial sac itself, very urgent symptoms, closely resembling those of strangulated hernia, may arise, so very urgent, that after using other remedies without effect, the surgeon may feel himself called on to propose an operation for their relief, and yet in which these symptoms may disappear without an operation having been submitted to. As an example of this class take the following.

Case 5. *Old irreducible Hernia, with Symptoms of Strangulation. (Recovery without operation.)*—I was requested by Mr Lawrie to visit with him a female servant, in a gentleman's family, who was apparently suffering under symptoms of strangulated hernia.

I found the patient (aged about 50,) with cold clammy skin, small quick pulse, constant vomiting, and occasional hiccough. On examining the hernia, which was a large femoral one, I found it very tense and painful to the touch; the tumour felt quite fixed in its position, and the parts felt thick and matted; the whole abdomen is also distended, tympanitic, and tender. The patient states, that she has been affected with the rupture for a great many years, and that it never could be reduced, although its reduction had been frequently attempted; she also mentioned, that on a former occasion, when she had a similar attack, an operation was proposed, but that she declined submitting to it, and got better without it having been performed. On being questioned as to the commencement of the present attack, she admitted having taken some food which usually disagrees with her, having drunk a quantity of ale; she had also been exposed to sudden cold, after being engaged in cooking. "She says, the pain is of a twisting nature, stretching up from the hernia towards the stomach, and that exacerbations of pain precede the vomiting, which latter symptom is now almost incessant." Previously to my seeing her, she had been bled, enemata had been administered, calomel and opium had been given, and hot fomentations applied to the abdomen, without the slightest relief; her tongue was furred, and red at the edges. Under these circumstances, she was again bled from the arm, and leeches applied over the abdomen, near the hernia, and a large opiate draught administered, and a pill containing gr.iss. of opium, 2 grs. of calomel, directed to be given every third hour. I again saw her, in the course of three hours, and as her symptoms still continued unrelieved, or rather had increased in intensity, for there was now occasional hiccough, I explained to her master, that although, from the rupture never having been reduced at any time, there might be some doubt, still I considered her symptoms so very urgent as to warrant an operation. But as she had escaped the operation on a former occasion, she was determined not to submit to it, she said, but to take her chance again. She was, therefore, again bled, a large sinapism applied over the epigastrium, a large opiate enema administered, and the calomel and opium pills ordered to be continued. We then left her, desiring to be sent for if she should alter her resolution regarding the operation. On calling next morning, I found her greatly better; the pain had begun to subside very shortly after the opiate enema was given; her bowels, however, had not yet been opened. I ordered a dose of castor oil, which operated in a short time, and in the course of a few days she had quite recovered.

Now, the result of this and similar cases may appear to some an argument in favour of delay. At the most, it is only applicable to

cases of old standing, where the hernia has been long irreducible, in which, therefore, the impossibility of reducing it by the taxis, is of no service to us in forming our diagnosis as to whether it is strangulated or not. But if, as I presume few will deny, the contents of such herniæ be liable to strangulation, then surely, even in such cases, if along with increased tension of the tumour we find all the urgent symptoms of strangulation, I still think that, in spite of occasional exceptions, such as the case I have detailed, the surgeon will act wisely for the safety of his patient who, after using active preliminary treatment, proposes and urges the operation being performed.

To suppose that this was a case of strangulated hernia, relieved by the treatment adopted, is an idea so preposterous, that, to any one acquainted with the state of parts in such cases, it may seem ridiculous even to mention it; yet we see "Cases of Strangulated Hernia, cured by Opiates, without Operation"!! occasionally reported in medical periodicals,—cases where, as in that just detailed, the symptoms are the result of gastro-intestinal irritation, apparently commencing in the intestine contained in the hernial sac.

Case 6. *Strangulation following direct injury of the Swelling.*—An old man, who for a great length of time had been the subject of scrotal hernia, and had never worn a truss, happened to receive a severe blow (supposed to be a kick) on the swelling. He was at some distance from home when he received the injury, and though faint and sick in the first instance, he managed to walk home. He then lay down complaining of sickness, but without telling what was really the matter. Vomiting, however, began soon afterwards, and then a medical man was sent for, who, on examination, found the parts over the hernia bruised and swollen; the hernial tumour, though not very tense, could not be reduced; and he had no motion in his bowels after he received the injury. Enemata were administered, and purgatives given by the mouth, and leeches were applied over the lower part of the belly, and various fomentations to the swelling, but without affording relief.

I saw the patient at 2 A.M. of the second day from the receipt of the injury. He was then labouring under all the symptoms of strangulated hernia. The tumour was tense and irreducible, whilst the patient stated he used to be able to put it back formerly. The abdomen was distended, and painful on pressure. There was obstinate constipation, and constant vomiting; his pulse was about 108, and compressible; the skin covered with perspiration, and there was great thirst, whilst the expression of his countenance indicated great suffering. Although from the general symptoms, taken in connection with the history of the case, there could be but little doubt that there was general peritonitis, resulting from the direct injury of the hernial sac and its contents, combined with strangulation of the latter, still it appeared to me that the operation afforded the only reasonable hope of relief. I according-

ly proposed this to the patient, but he peremptorily refused to submit either to that or any other farther remedies being used; so obstinate was he, indeed, that he would not even allow the use of the warm bath, or any farther attempt te reduce the hernia by the taxis; a medical gentleman, in whose service he had formerly been, tried in vain to persuade him to submit. The vomiting increased in frequency, became stercoraceous, and, after great suffering, he expired on the third evening after the injury.

Leave was obtained from the family to examine the body.

The peritoneum was found extremely vascular, and there was great effusion of sero-purulent fluid, with flakes of coagulable lymph contained in its cavity. The vascularity was most marked, extending from the sac, and a portion of the great omentum contained in it, upwards to the parietal peritoneum, and that investing the stomach. The parts about the neck of the sac were found engorged with blood, and much swollen. The sac, generally, was of enormous thickness, (nearly three lines) and coated internally with recently effused lymph. On its external surface, in the scrotal region, there was a thin coating of extravasated blood. The parts contained in the sac, were a portion of the great omentum, behind which lay a convolution of the small intestine, much swollen, and of a dark colour; both the gut and the omentum were matted together by soft adhesions of recent lymph; the intestinal canal above the incarcerated portion was distended with liquid feces, whilst the large intestine was contracted and empty.

This case is valuable, as showing that even in cases of old herniæ, where the symptoms have, in the first instance, depended upon irritation or inflammation of the sac or its contents, strangulation of the protruded parts may be the result, and the operation may be required to afford the patient a chance of relief. For we must bear in mind, that although at the first there may be no constriction of the hernia, yet, after a time, owing to vascular engorgement, or the inflammatory swelling, such a relative disproportion may arise between the protruded parts, and the aperture through which they passed, that they cannot be returned, and then the swelling gradually increasing, strangulation of the gut is the result, which must terminate fatally, if not relieved by operation.

That such was the cause of death in the case just detailed, is, I think, obvious, both from its history and symptoms, and was confirmed, beyond a doubt, by the *post-mortem* appearances. It is true that, viewed in any light, such cases are very unfavourable, on account of the degree of peritonitis already present. Yet we must remember, that the strangulated hernia is certainly fatal, except relieved by operation, and that therefore, without this be done, we afford our patient no chance of escape. Whereas, as regards the inflammation already present, we cannot much increase that by the operation. Nay, will we not rather, by removing such a prominent source of irritation, be better able to combat the inflammatory action.

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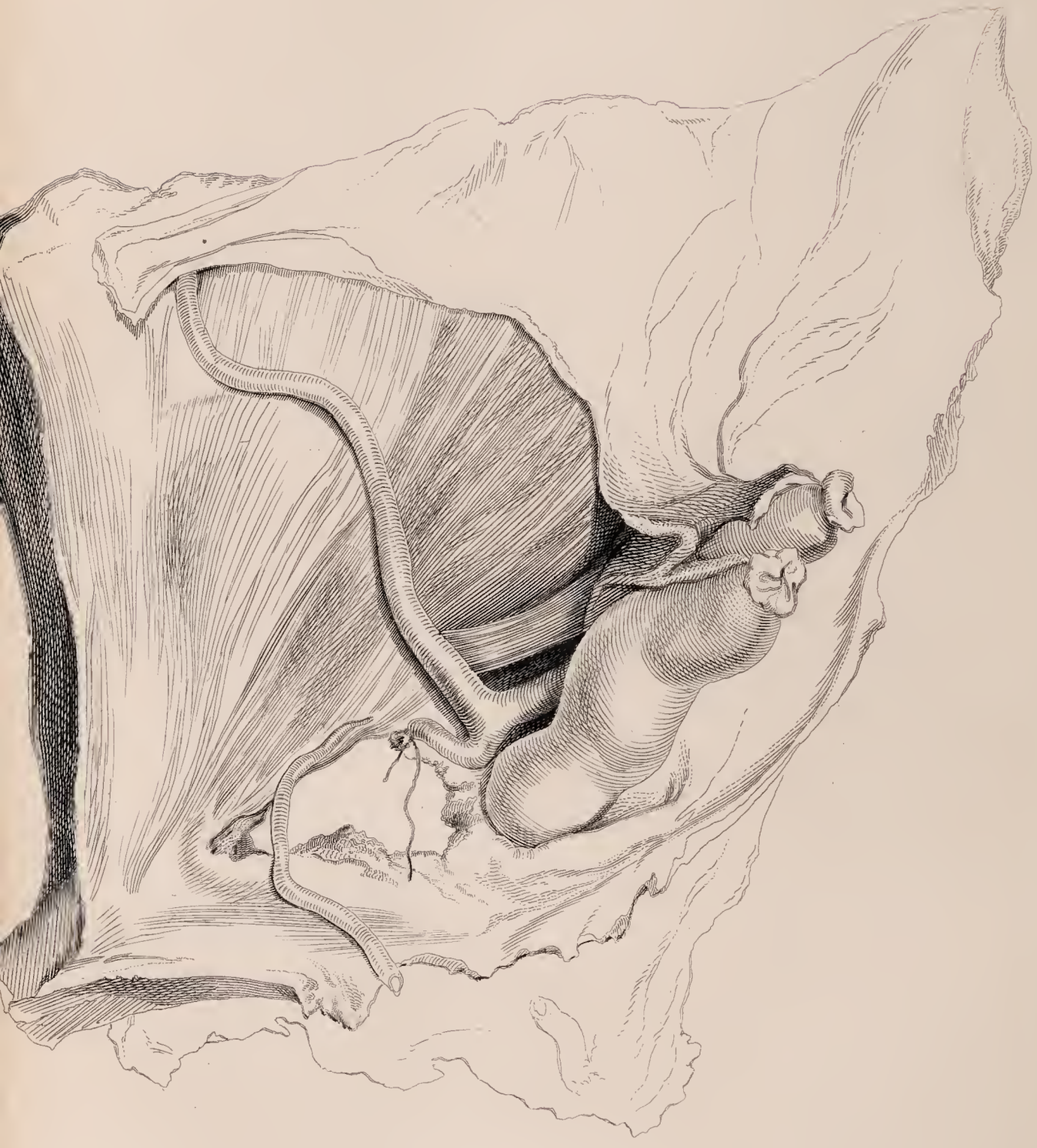

Mr. Spence's case of Hernia.

Del.

W. Banks Sc.